

# Georgia Trauma System

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A Decade of Focused Efforts

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# Georgia Trauma System

**41 YEARS IN THE MAKING!**

- But who's counting...?
- Georgia's first trauma center was designated 42 years ago
- We have made significant progress toward an optimal statewide trauma system



# Georgia Trauma System

## State Trauma Study Committee

- Created during the 2006 Legislative Session
- Five members of House and five from the Senate
- Heard testimony from State and National trauma “experts”
- Held 5 regional public meetings



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# Georgia Trauma System

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## State Trauma Study Committee 2006 Key Findings

- Georgia's trauma death rate is 20 percent worse than the national average
- Only 30 percent of trauma injuries are treated at designated trauma centers
- Traumatic death rates in rural Georgia are much higher than in the urban areas of Georgia
- Annually, Georgia's trauma care providers (hospitals, surgeons, and EMS) deliver \$250 million in uncompensated trauma care



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# Georgia Trauma System

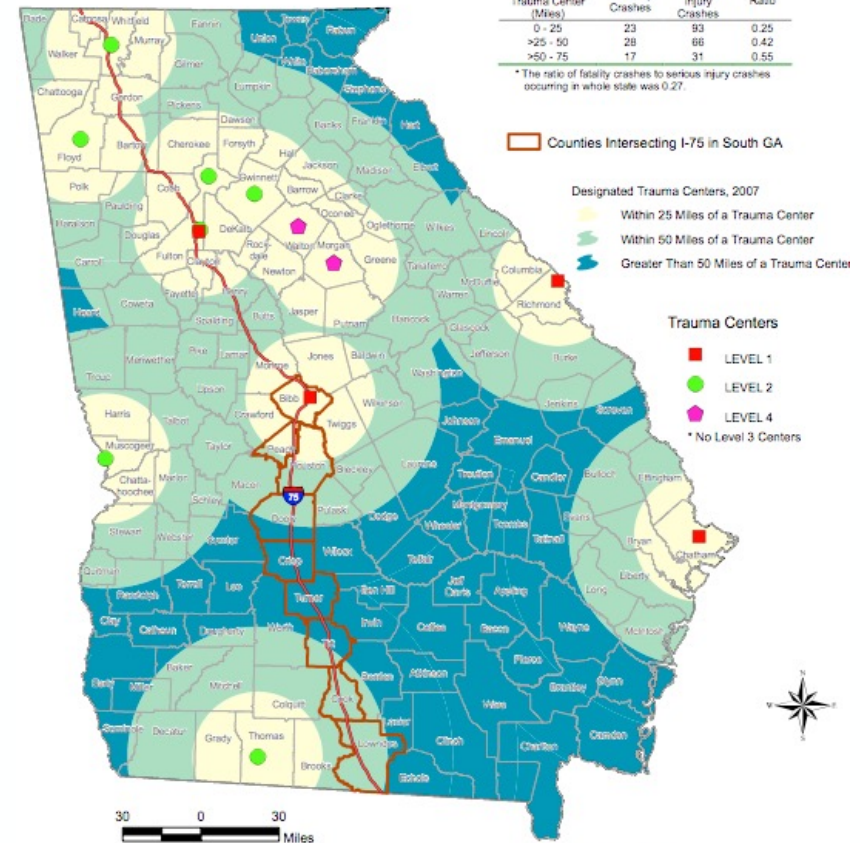
- Without funding, retention of centers in the system was a problem
- Significant gaps in coverage in rural Georgia
  - I-75 “Corridor of Death”

## Fatality and Serious Injury Crashes Along I-75 in South Georgia, 2003

Ratio of Fatality Crashes to Serious Injury Crashes in the Counties Intersecting I-75 in South Georgia \*

Distance to Trauma Center (Miles)	# Fatality Crashes	# Serious Injury Crashes	Ratio
0 - 25	23	93	0.25
>25 - 50	28	68	0.42
>50 - 75	17	31	0.55

\* The ratio of fatality crashes to serious injury crashes occurring in whole state was 0.27.



Created: July 2008  
Source: Division of Public Health  
& GA DOT Accident Reporting Crash Data  
Projection: Georgia Statewide Lambert  
Conformal Conic  
Map originally printed in color



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Georgia Department of Human Resources  
Division of Public Health  
Health Planning and Assessment Unit



*“Islands of excellence in a sea of chaos”*

J. Patrick O’Neal, MD 2008



# 2009 ACS Trauma Systems Consultation

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## 12 Priority Recommendations

- Statutory Authority and Administrative Rules
- System Leadership
- Lead Agency and Human Resources within Lead Agency
- Trauma System Plan
- System Integration
- Financing
- Emergency Medical Services
- Definitive Care
- System Coordination and Patient Flow
- Disaster Preparedness
- System Evaluation and Quality Assurance
- Trauma Management Information Systems



# Key Focus Area: Trauma System Plan

- Develop a comprehensive trauma system plan through a collaborative process to:
  - Guide development of enabling legislation
  - Direct the allocation of resources
- Identify roles for all hospitals and stakeholders in an inclusive trauma system within the trauma system plan





# Trauma System Plan

## **Collaboration between:**

- Georgia Department of Public Health
- Georgia Trauma Commission
- Governor's Office of Planning and Budget
- Trauma centers
- Trauma care providers
- Pre-hospital personnel



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# Trauma System Plan

## Mission

To implement a statewide, patient-focused trauma system that provides optimal pre-hospital, hospital, and rehabilitative care to trauma patients while creating strategies to reduce injury rates.

## Vision

A safe and secure environment for all Georgians enhanced by a functional, integrated, and continuously improving trauma system.



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# Trauma System Plan

Defined 7 Components that form the core for the Georgia Trauma System Plan

1. Legislation and Finance
2. Public Information, Education, and Prevention
3. Professional Resources
4. Pre-Hospital Resources
5. Definitive Care Facilities
6. Evaluation
7. Research



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## Georgia Trauma System State Plan

January 2015



Department of Public Health  
Division of Health Protection  
Georgia Office of EMS/T

# Trauma System Plan

- Finalized in 2015
  - Six years after the 2009 Consultative Visit
- 2020 under revision
  - Delayed due to Pandemic response competing priorities
- Beautiful plan on paper, but we still lacked funding to operationalize all components...



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# Key Focus Area: System Integration

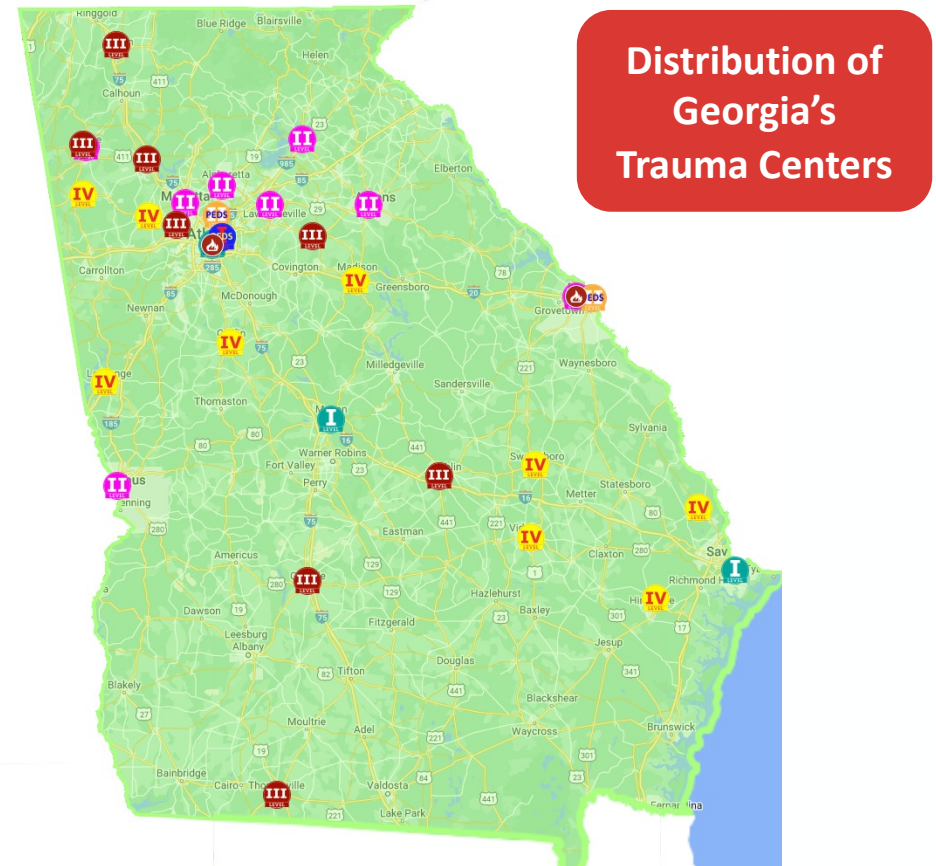
- Establish multidisciplinary RTACs centered around level I or II trauma centers
  - Include representatives from trauma centers, acute care facilities, and EMS services
  - Ensure oversight from the lead agency
  - Build upon existing EMS Regional Councils as appropriate, recognizing that there may be incongruency and overlap with regional boundaries



# System Integration



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# System Integration

- RTAC activity lacked continuity across EMS Regions
- 2009 Regionalization Pilot Region 5 & Region 6
- Facilitated by existing EMS councils
- By 2021, all 10 EMS Regions were active
- Regional Improvement Grants:
  - 2016, 2018 & 2020, average \$341k per year
- Each Region required to submit a BIS assessment and a Regional Trauma Plan



# System Integration

- \$1M to fund the placement of bleeding control kits in all Georgia public schools & buses
- The RTACs were the backbone of Georgia's STB School Program
- Trauma centers provided training and aided in kit distribution

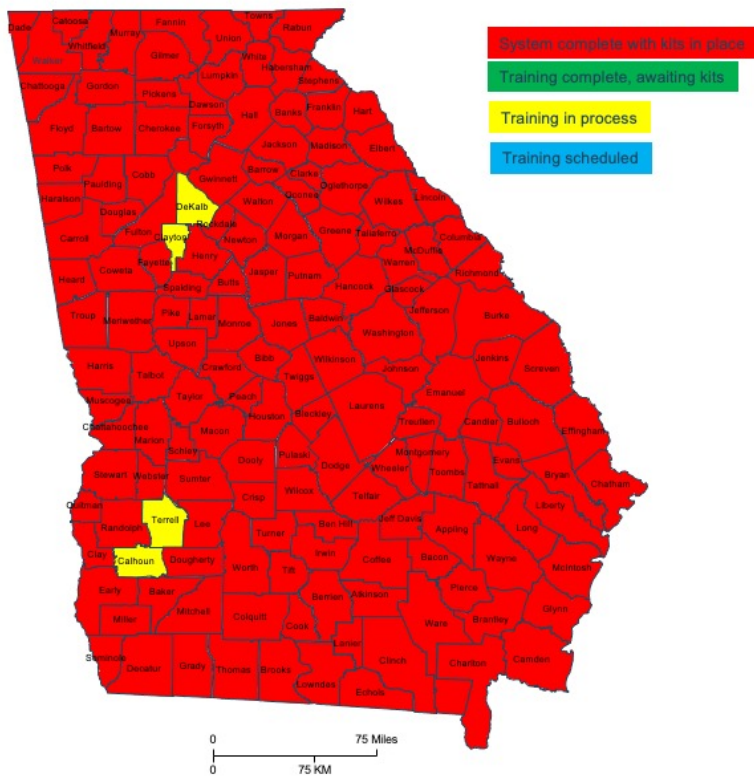


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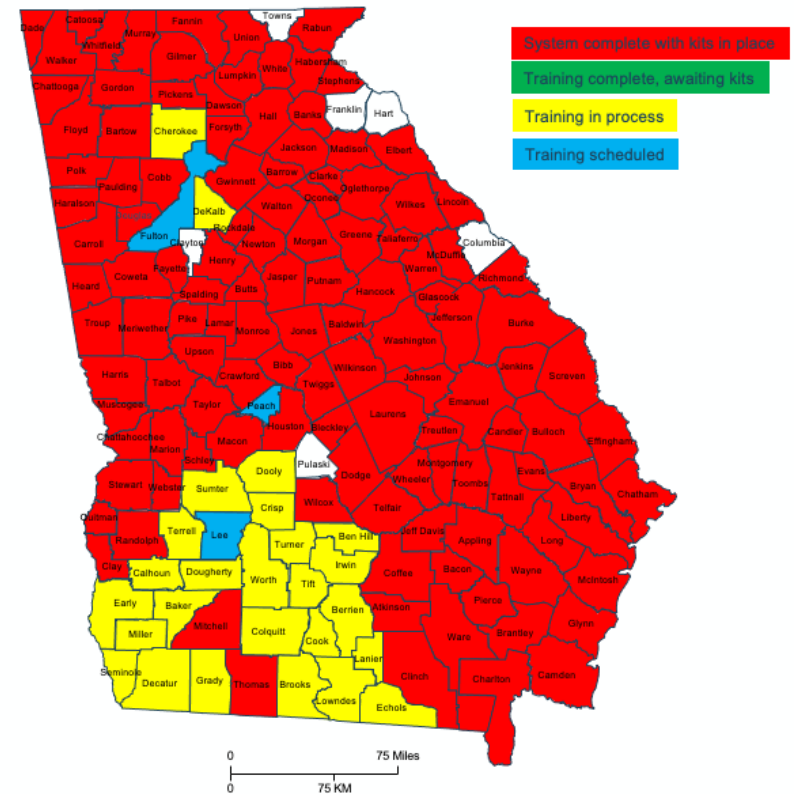


# System Integration

## STB School Program



## STB School Bus Program



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# Key Focus Area: Financing



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# **Financing**

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- Identify a dedicated and sustainable funding source for the essential administrative, personnel, and infrastructure costs
- Link funding to deliverables to support performance improvement in the areas of system management, access to care, patient safety and outcomes, and financial stability of the system



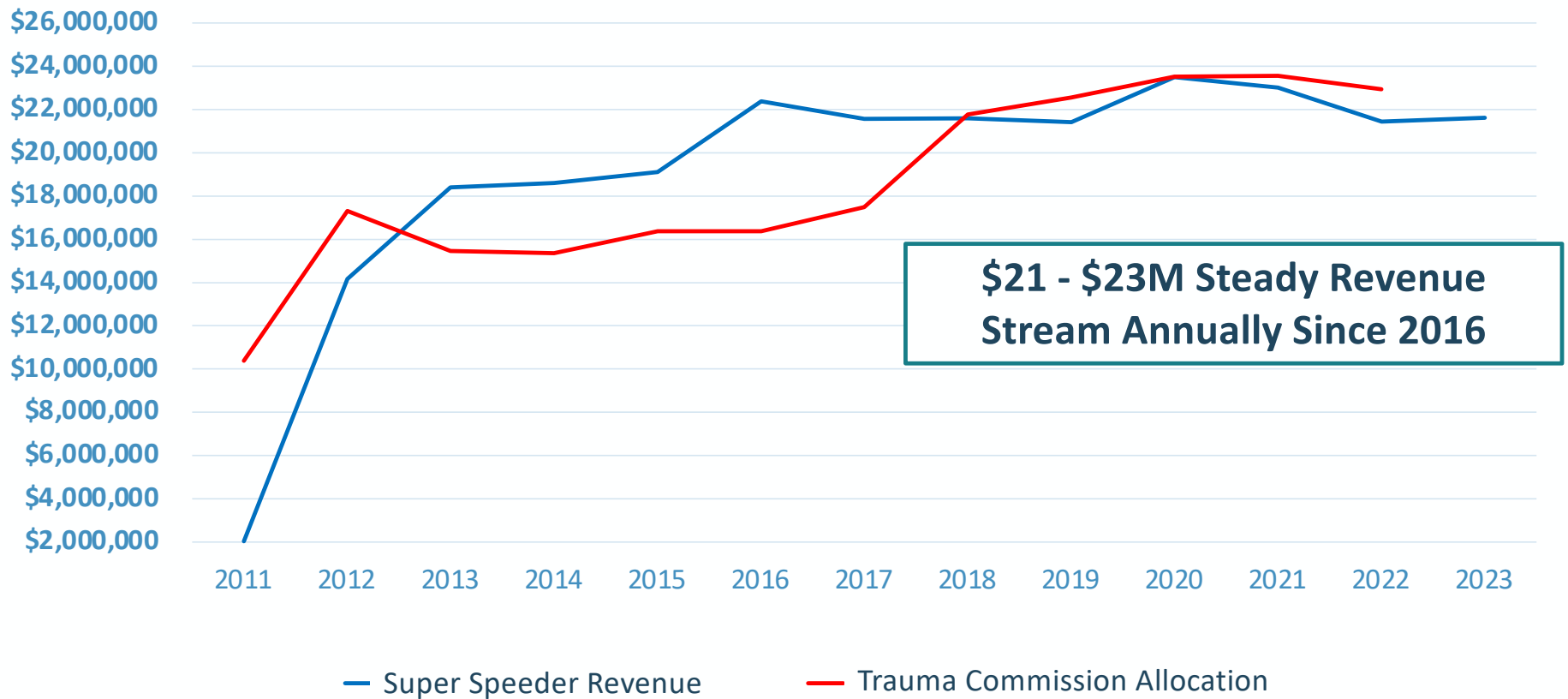
# Financing: Revenue

- Established 2010
- \$200 fine for traveling:
  - $\geq 75$ mph on two-lane roads
  - $\geq 85$ mph any road
- Revenues deposited in the General Fund

## Primary Revenue Source



# Financing



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# Key Focus Area: Financing

- Secondary Revenue Source
- Established in 2016



## Firework Excise Tax Revenue

Year	Revenue	Allocation to Trauma
2017	\$ 927,751.00	\$ 0
2018	\$ 1,240,141.00	\$ 176,845.00
2019	\$ 1,464,025.00	\$ 805,214.00
2020	\$ 1,313,452.00	\$ 722,399.00
2021	\$ 1,631,696.80	\$ 897,434.00
2022	\$ 2,722,391.40	\$ 1,497,861.00



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# Financing

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- House Bill 511
- Appropriation of dedicated revenues
- Established the Georgia Trauma Trust July 1, 2022

## Georgia House Chamber Mobile Streaming March 3, 2021



*Only Took 12 YEARS!*



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# Financing: Deliverables Linked to Performance

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- In 2010, only 10% of readiness costs funds were set aside for the PBP program with only 3 performance criteria.
- In 2019, 80% of funds were in the PBP program with 11 performance criteria.





# Financing: Deliverables Linked to Performance

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## Three domains:

1. System participation
2. ACS Optimal Resources “Orange Book” criteria
3. GQIP engagement & participation

Annual report card submission

Trauma Center Level	% of Readiness At Risk
Level I & II	80%
Level III	60%
Level IV	19%
Burn Centers	50%

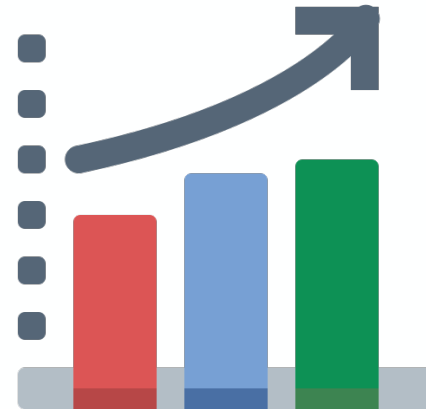
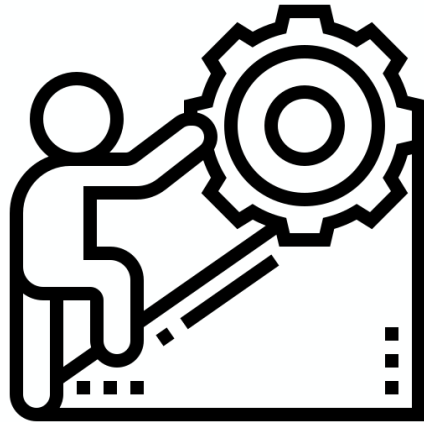


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## Key Focus Area: System Evaluation & Performance

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- Develop and implement statewide and regional trauma system performance improvement plans



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# System Evaluation and Performance

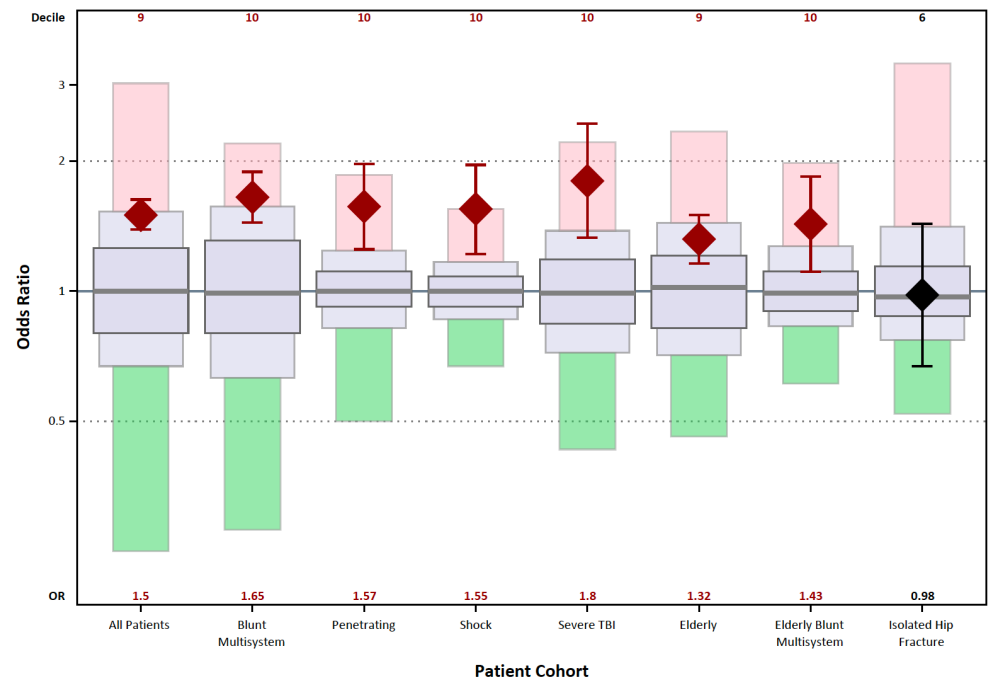
## Georgia Quality Improvement Program (GQIP)



# System Evaluation and Performance

- Significant underperformance in seven of the eight risk-adjusted major hospital events by cohort
- Odds ratios with confidence intervals in all seven were well above the median
- Many in the 9<sup>th</sup> and 10<sup>th</sup> decile

## GQIP Spring 2016 Risk Adjusted Major Complications



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# System Evaluation and Performance

## ACS Consultation and Verification Progress

2015

First ACS  
Verified TC in  
GA, Level II

2017

ACS Consultative  
Visit Required  
for L I and L II  
TCs

2019

ACS Verification  
Required for all  
LI and LII TCs by  
June 30, 2023

2020

ACS Verification  
Required by  
June 30, 2025,  
for L III TCs

2021

First ACS  
Verified LIII TC

*8 ACS Verified TCs*

2022

12 of Georgia's  
32 TCs are ACS  
Verified



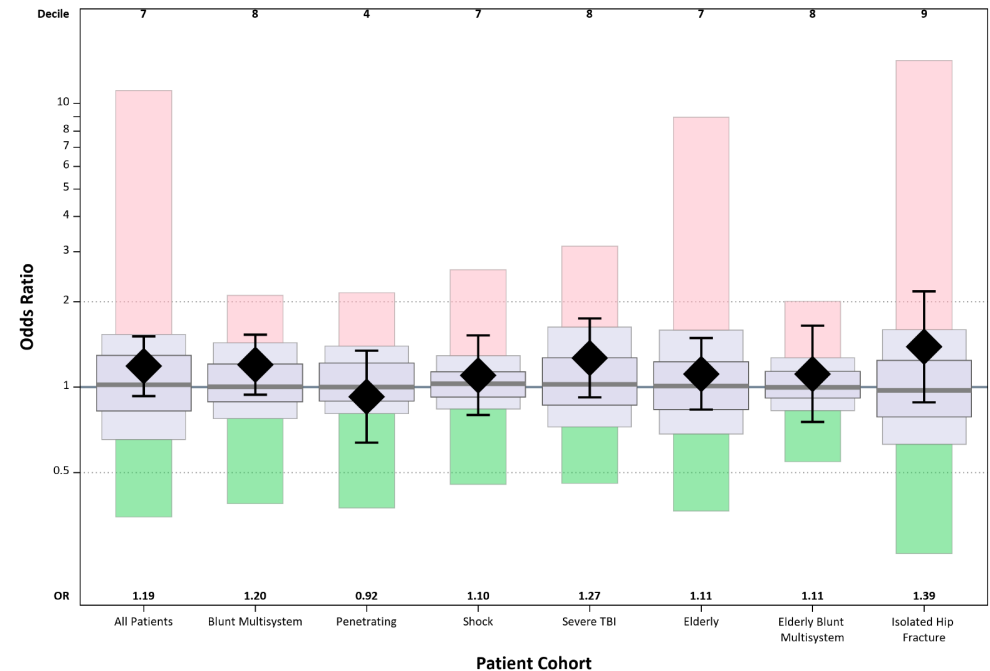
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# System Evaluation and Performance

- No high outliers in any of the eight risk-adjusted major hospital events by cohort
- Odds ratios with confidence intervals in all eight cross the median
- Many under the 7<sup>th</sup> decile



## GQIP Spring 2021 Risk Adjusted Major Complications

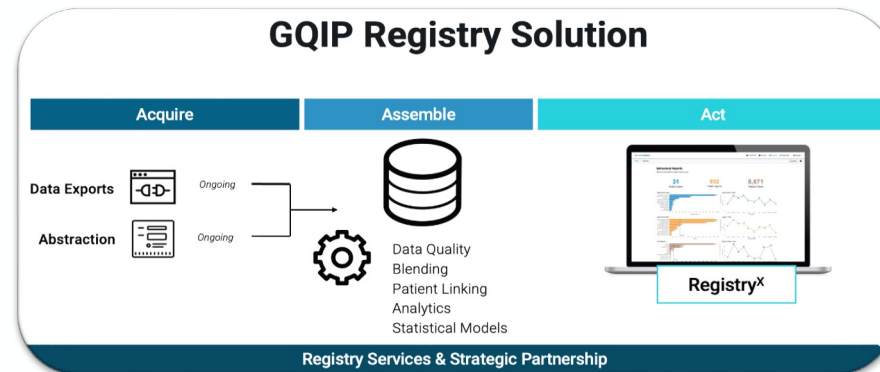


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# System Evaluation and Performance

## ***NEXT STEPS***

- Replicate the Michigan (M-TQIP) model
- Deploy customized, real-time risk-adjusted benchmarking
- Inclusive of Level IV centers



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# Ongoing Challenges

- More funding is needed to expand the system
- Recruitment and retention of trauma centers, particularly in rural areas
- Level IV centers – validating the quality of care in level IVs and underscoring the vital role they play in the trauma system





# Key Partnerships



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Georgia Governor's Office of Highway Safety



Georgia Society *of the ACS*

